

OPTIMIZATION OF RADIOCHEMICAL TECHNIQUE FOR TRANSURANIUM ELEMENT CONTENT DETERMINATION IN ENVIRONMENTAL SAMPLES

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Optimization of technique for transuranium element content determination in environmental samples under presence of background component, which is proportional to tracer activity, is considered. Expressions for calculating of tracer solution activity and measuring time optimal values, needed for achieving required precision of the analysis, as well as low limit of detection are obtained. It is shown, that presence of uncertainty in the above background component sets principal limit on the value of minimal activity, which can be measured.